

## REMARKS

### Summary of the Examiner's Actions

The examiner rejected Claim 24 under 35 U.S.C. § 102(b) as being anticipated by Yarita, et al., U.S. Patent Number 6,411,353 ("Yarita, et al."). Assignee acknowledges the rejection under 35 U.S.C. § 102(b).

The examiner rejected Claims 26, 28, and 32 under 35 U.S.C. § 103(a) as being obvious under Yarita in view of Bowman, U.S. Patent Number 6,491,412 ("Bowman"). Assignee acknowledges the rejection under 35 U.S.C. § 103(a).

The examiner objected to Claims 29-31 and 33 as being upon a rejected base claim and indicated that such claim(s) would be allowable if rewritten in independent form include all of the limitations of the base claim and any intervening claims. Assignee appreciates such indication.

The examiner allowed Claims 1-23. Assignee appreciates such indication.

### Rejections under 35 U.S.C. § 102(b)

The examiner rejected Claim 24 under 35 U.S.C. § 102(b). Section 2131 of the Manual of Patent Examining Procedure describes the basis for anticipation under 35 U.S.C. § 102. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990).

The examiner rejected Claim 24 under 35 U.S.C. § 102(b) as being anticipated by Yarita. Claim 24 contains means-plus-function elements. The Manual of Patent Examining Procedure clearly states that

the "boarded reasonable interpretation" that an examiner may give means-plus-function language is that statutorily mandated in paragraph six. *Accordingly, the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination.*"

MPEP § 2181 (emphasis added). The rejection made by the examiner states:

With respect to claim 24, Yarita teaches an apparatus for providing backlight illumination of an image (Figs. 10 and 14) comprising: a means for forming an illumination circuit (LP) on a substrate (SUB1); a means for supplying power (LCT) to the illumination circuit; and a means for backlighting (BL) the image (PNL), and a means (SHD) for blocking a front view of the illumination circuit (Fig. 16).

*Paper No. 20060309, pg. 2.*

Yarita discloses a construction for a sealed liquid crystal display. Yarita describes the element LP as a cold cathode fluorescent lamp shown in Figure 10. Yarita, col. 11, line 31. Yarita substrate SUB1 is shown in Yarita Figure 1 as part of the Yarita liquid crystal display element PNL. Figures 14 and 38 clearly show that the Yarita cold cathode fluorescent lamp LP is connected to molded case MCA and not to the Yarita liquid crystal display element PNL. Thus, Yarita does not disclose a "means for forming an illumination circuit on a substrate" as required by Claim 24.

If this basic structural distinction is not clear enough, paragraph [0035] of the present application clearly links the function of "forming an illumination circuit on a substrate" to the structure of "conductive traces cured to the plate ..." The Yarita cold cathode fluorescent lamp LP is clearly not the same as "conductive traces cured to the plate" and, as stated in MPEP § 2181, the examiner cannot ignore the corresponding structure disclosed in the application in order to make a rejection. Accordingly, Assignee respectfully requests that the examiner withdraw the rejection of Claim 24 under 35 U.S.C. § 102(b).

### Rejections under 35 U.S.C. § 103(a)

The examiner rejected Claims 26, 28, and 32 35 U.S.C. § 103(a). In order to support a rejection under 35 U.S.C. § 103(a), “the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.” MPEP § 2142, pg. 2100-121, 8th ed. “To reach a proper determination under 35 U.S.C. § 103(a), the examiner must step backward in time and into the shoes worn by the hypothetical ‘person of ordinary skill in the art’ when the invention was unknown and just before it was made.” *Id.* The first element in establishing a *prima facie* case of obviousness is that “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings.” MPEP § 2143, pg. 2100-122, 8th ed. The second element is that there “must be a reasonable expectation of success.” *Id.* The third element is that “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” *Id.*

The examiner has proposed that a combination of Yarita and Bowman render Claims 26, 28, and 32 obvious under 35 U.S.C. § 103(a). Yarita discloses a liquid crystal display (LCD) device having the upper and lower cases clamped together by crimping. *Yarita*, col. 1, lines 6-11. In rejecting Claims 26 and 28, the examiner states:

Yarita teaches applying an opaque border (SHD) to a surface (Fig. 16) of a substrate (SUB1), applying circuits to a plurality of selected portions of a surface of the substrate (Fig. 10); applying at least one light emitting device (LP) to at least one selected portion of the surface (Fig. 10), the at least one light emitting device positioned such that each of a pair of terminals is in contact with the circuit (Fig. 10), and a power connector (LCT) having a pair of terminals (LPC1 and LPC2). Yarita does not explicitly teach applying a conductive polymer thick film ink, the conductive polymer thick film ink forming a plurality of conductive traces[,] the polymer thick film in helping to for[m] a circuit, curing the conductive polymer thick film ink, and connecting the at least one light emitting device with an adhesive. Bowman teaches applying a conductive polymer thick film ink, the conductive polymer thick film ink forming a plurality of conductive traces[,] the polymer thick film in

helping to for[m] a circuit, curing the conductive polymer thick film ink (column 5, lines 63-67), and connecting the at least one light emitting device with an adhesive (column 3, lines 47-50). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use to the teaching of the traces of Bowman to create the light assembly of Yarita, in order to create conductive traces with an easy assembly (column 5, line 47-column 6, line 7). As for claim 28, all of the elements of the claim are disclosed above, thus the methods are implicitly implied.

*Paper No. 20060309, pg. 3 (corrected by reader).*

*Claim 26*

Claim 26 of the present application recites the limitation of "applying an opaque border to said surface of the substrate." Yarita Figure 1 clearly shows that the border identified by the examiner as SHD is not in contact with the substrate identified by the examiner as SUB1. Thus, Yarita does not disclose this element of Claim 26. The examiner does not allege that the missing element is supplied by Bowman. In fact, Bowman does not disclose any shield to hide the illumination circuit. Further, the examiner does not suggest any motivation to combine Yarita and Bowman to achieve the claimed step.

Yarita describes the construction of the liquid crystal display element (PNL) in the Background of the Invention. In relevant part, the liquid crystal display element includes "a plurality of gates lines extending in an X direction and arranged in a y direction, and drain lines insulated from the gate lines, extending in the y direction and arranged in the x direction are formed on the surface, on the liquid crystal layer side of one of the two transparent insulating substrates (made from glass or the like) oppositely disposed with a liquid crystal layer put therebetween." Yarita, col. 2, lines 47-53. Yarita continues by stating that "[e]ach of the areas enclosed by the these gate lines and drain lines constitutes a picture element area in which a thin film transistor (TFT) as a switching element and a transparent picture element are formed." *Id.* at lines 54-57. The examiner suggests one skilled in the art would be motivated to apply the

techniques of Bowman when constructing the liquid crystal display of Yarita. Assignee respectfully submits that the substitution of a polymer thick film into the liquid crystal display element described by Yarita would render the liquid crystal display element unusable and, thus, there is no motivation to combine Bowman and Yarita.

Absent the gates and drains, Yarita does not disclose any other conductive traces that are applied to the Yarita substrate SUB1/SUB2. Claim 26 recites the limitation of "applying at least one light emitting device to at least one selected portion of said surface, said at least one light emitting device positioned such that each pair of terminals is in contact with said polymer thick film ink." The examiner asserts that Yarita discloses "applying at least one light emitting device (LP) to at least one selected portion of the surface (Fig. 10)." Contrary to the examiner's assertion, Figure 10 does not show LP connected to anything and, further, does not show the Yarita substrate SUB1 or the liquid crystal display element PNL of which the substrate SUB1 is a part. Thus, it does not follow that the Yarita light emitting device LP is attached to the Yarita substrate SUB1. Yarita Figure 38 clearly shows the Yarita light emitting device LP is completely separate from the Yarita substrate SUB1 and the Yarita liquid crystal display element PNL. Thus, Yarita does not disclose this element of Claim 26. The examiner does not allege that the missing element is supplied by Bowman. Further, the examiner does not suggest any motivation to combine Yarita and Bowman to achieve the claimed step.

Assignee respectfully submits that the combination of Yarita and Bowman fails to disclose each and every element of the Claim 26 and that there is any motivation to combine Yarita and Bowman. Thus, the combination of Yarita and Bowman fail to establish two of the three requirements necessary for a *prima facie* case of obviousness. Accordingly, Assignee requests that the examiner withdraw the rejection under 35 U.S.C. § 103(a) as applied to Claims 26 and to Claims 28 and 32 depending therefrom.

**Claim Objections**

Claims 29-31 and 33 depend from Claim 26 which Assignee submits is allowable over the cited prior art. Assignee expressly reserves the right to rewrite Claims 29-31 and 33 in independent form in a subsequent response after the examiner has had an opportunity to consider Assignee's remarks. Because Assignee believes that the underlying base claim is allowable, it is respectfully requested that the examiner withdraw the objection to Claims 29-31 and 33.

**Miscellaneous Amendments to the Drawings**

Upon review of Figure 2, Assignee noted the omission of the element number 206 referred to in paragraphs [0034] and [0037]. Amendment Figure 2 now includes the missing element number.

**Summary**

In view of the arguments presented herein, it is believed that the above-identified patent application is in a condition for the issuance of a Notice of Allowance. Such action by the examiner is respectfully requested. If, however, the examiner is of the opinion that any of the drawings or other portions of the application are still not allowable, it will be appreciated if the examiner will telephone the undersigned to expedite the prosecution of the application.

Please charge any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 16-1910 (29495.00).

Respectfully submitted,

PITTS & BRITTIAN, P.C.

/Ken Hoffmeister/

by: J. Kenneth Hoffmeister  
Registration Number 43,675

PITTS AND BRITTIAN, P.C.  
P.O. Box 51295  
Knoxville, Tennessee 37950-1295  
(865) 584-0105 Voice  
(865) 584-0104 Fax